WHAT IS CLAIMED IS:

1. An optical device comprising:

a solid composition layer having a predetermined surface profile on a surface thereof; and

a multi-layered dielectric film coating the surface of the solid composition layer.

2. An optical device according to claim 1, wherein a glass transition temperature of the solid composition layer is not lower than 100°C.

3. The optical device as claimed in claim 2, wherein the glass transition temperature of the solid composition is not lower than 150°C.

4. The optical device as claimed in claim 2, wherein the glass transition temperature of the solid composition is not lower than 200°C.

5. An optical device according to claim 1, wherein a linear thermal expansion coefficient of the solid composition layer is not larger than 190 ppm/°C.

6. The optical device as claimed in claim 5, wherein the linear thermal expansion coefficient of the solid composition

is at most 170 ppm/°C.

7. The optical device as claimed in claim 6, wherein the linear thermal expansion coefficient of the solid composition is at most 150 ppm/°C.

8. An optical device according to claim 1, wherein a weight reduction in the solid composition layer when heated at a temperature not higher than the glass transition temperature thereof is not larger than 1.3 % by weight.

9. The optical device having a predetermined surface profile as claimed in claim 8, wherein the weight reduction in the solid composition layer is at most 1.0 % by weight.

10. The optical device having a predetermined surface profile as claimed in claim 8, wherein the weight reduction in the solid composition layer is at most 0.7 % by weight.

11. The optical device as claimed in claim 1, wherein the solid composition layer is constituted by a layer formed by providing at least one of heat or UV light to a fluid composition containing a polymerizable organic group on a substrate so as to polymerize and cure the fluid composition.

12. The optical device as claimed in claim 11, wherein the polymerizable organic group is an epoxy group.

13. The optical device as claimed in claim 12, wherein the fluid composition contains the following components (A), (B), (C) and (D) in the ratio indicated below:

(A) non-fluorinated epoxy compound 20 to 99.9 % by weight,

(B) polymerization initiator 0.1 to 7 % by weight,

(C) fluorinated epoxy compound 0 to 79.9 % by weight,

(D) silane coupling agent 0 to 10 % by weight.

14. The optical device as claimed in claim 13, wherein the component (A) is an alicyclic epoxy compound.

15. The optical device as claimed in claim 11, wherein the polymerizable organic group is at least one selected from an acryloxy group, a methacryloxy group and a vinyl group.

16. The optical device as claimed in claim 1, wherein the multi-layered dielectric film includes at least two layers formed with, as an essential ingredient thereof, a material selected from SiO_2, TiO_2, Ta_2O_5, ZrO_2, Nb_2O_5 and MgF_2.

17. The optical device as claimed in claim 16, wherein a

thickness of each layer of the multi-layered dielectric film falls between 1 and 600 nm.

18. The optical device as claimed in claim 16, wherein a grain mass or a columnar structure existing in the multi-layered dielectric film has a diameter of smaller than 10 nm.

19. The optical device as claimed in claim 1, wherein the surface of the solid composition layer polymerized and cured is coated with an SiO_2 film having a thickness of from 1 to 200 nm, forming the multi-layered dielectric film.

20. The optical device as claimed in claim 11, wherein the substrate includes at least one selected from glass, ceramics, metal and resin.

21. The optical device as claimed in claim 1, of which the predetermined surface profile functions as a transmission grating, a Fresnel lens or a microlens array.

22. A method for fabricating an optical device, comprising the steps of:

applying a fluid composition containing a polymerizable organic group between a substrate and a mold as to be a film hermetically sandwiched therebetween;

exposing the fluid composition to at least any one of heat and UV light to thereby cure the fluid composition;

releasing a solid composition layer, which is resulted in by curing the fluid composition, from the mold; and

forming a multi-layered dielectric film on a surface of the solid composition layer.

23. The method for fabricating an optical device as claimed in claim 22, wherein the fluid composition contains a photopolymerization initiator.

24. The method for fabricating an optical device as claimed in claim 22, wherein a glass transition temperature of the solid composition layer is not lower than 100°C.

25. The method for fabricating an optical device as claimed in claim 23, wherein at least one of the substrate and the mold is formed of a UV-pervious material, and the fluid composition is exposed to UV light that has passed through the substrate or the mold.

26. The method for fabricating an optical device as claimed in claim 22, in which the solid composition layer has a linear thermal expansion coefficient not larger than 190 ppm/°C.

27. The method for fabricating an optical device as claimed in claim 26, wherein the fluid composition contains a photopolymerization initiator.

28. The method for fabricating an optical device as claimed in claim 26, wherein at least one of the substrate and the mold is formed of a UV-pervious material, and the composition is exposed to UV light that has passed through the substrate or the mold.

29. The method for fabricating an optical device as claimed in claim 22, wherein a weight reduction in the solid composition layer when heated at a temperature not higher than the glass transition temperature thereof is not larger than 1.3 % by weight.

30. The method for fabricating an optical device as claimed in claim 29, wherein the fluid composition contains a photopolymerization initiator.

31. The method for fabricating an optical device as claimed in claim 29, wherein at least one of the substrate and the mold is formed of a UV-pervious material, and the composition is exposed to UV light that has passed through the substrate or the mold.